

From: ["Keteles, Kristen" </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP \(FYDIBOHF23SPDLT\)/CN=RECIPIENTS/CN=44AFFC6DA534432A8A7787C6344185EE-KETELES, KRISTEN>](mailto:Keteles.Kristen@EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=44AFFC6DA534432A8A7787C6344185EE-KETELES, KRISTEN)
To: [Spence](#)
[Sandra](#)
CC:
Date: 12/10/2014 1:51:25 PM
Subject: FW: Reply C dubia vs. D Magna - use in permits RE: High TDS Waters and Ionic Imbalance Issue
Attachments: [WV WET Ltr EPA to WVDEP 3-3-11.pdf](#)

From: Phillips, Laura

Sent: Wednesday, December 10, 2014 12:47 PM

To: Lazorchak, Jim; Stoddard, Jamey

Cc: Denton, Debra; Schaeffer, Blake; Biales, Adam; Spence, Sandra; Keteles, Kristen; Bless, Diana; Oshiro, Robin; Clark, Jackie; Kibler, Virginia

Subject: Reply C dubia vs. D Magna - use in permits RE: High TDS Waters and Ionic Imbalance Issue Jim, Jamey and cc's:

[REDACTED]

[REDACTED]

[REDACTED]

Laura J. Phillips

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-----Original Message-----

From: Lazorchak, Jim

Sent: Wednesday, December 10, 2014 2:24 PM

To: Stoddard, Jamey

Cc: Phillips, Laura; Denton, Debra; Schaeffer, Blake; Biales, Adam; Spence, Sandra; Keteles, Kristen; Bless, Diana

Subject: RE: High TDS Waters and Ionic Imbalance Issue Jamey I do believe in Region 9 there are one or 2 permits that have allowed the use of D magna in state NPDES permits. I think one was in Arizona. The rationale is not similar to what Alaska has raised. The rationale was that the source water was naturally high in TDS and that was not suitable for Ceriodaphnia to distinguish toxicity of the source water from what the municipal effluent was adding. How that was done administratively I do not know. Other than it was the best available method that was published post WET guidelines.

I will check with the folks I know from a consulting firm to see if they recall what city the D magna method was used. But I think Debra should be able to check with her NPDES folks as well.

[REDACTED]

I also cced Laura Phillips the WET lead in DC so she can weigh in as well as determine whether other permits have used the D magna method.

I am also attaching another alternative test method for a mayfly that we have developed that is even more sensitive than the Ceriodaphnia test to TDS. However, it is only found in the eastern U.S. Since EPT species are usually the first to be impacted in streams, developing regionally representative sensitive species test methods are important. See also a recent presentation made by my collaborator Chris Nietch showing how this species and other macroinvertebrates are sensitive to different anion recipes for TDS.

If I can be of any additional help let me know?

Jim

James M Lazorchak

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http://www.artsci.uc.edu/departments/biology/byDeptMembers/faculty.html?eid=lazorcjs&thecomp=uceprof_0#viewmore

" Only when the last tree has died,the last river poisonedand the last fish caught, will we realize we cannot eat money".Cree Indian saying.

Our mandate is to restore and maintain the chemical, physical, and biological integrity of the Nations waters.

I speak for the fishes and benthos!

Is this good enough to put someone in jail!

-----Original Message-----

From: Stoddard, Jamey

Sent: Wednesday, December 10, 2014 2:01 PM

To: Lazorchak, Jim

Subject: FW: High TDS Waters and Ionic Imbalance Issue

Hi Jim-

I work as the WET coordinator for the NPDES permits here in Region 10 and am working on an issue with an Alaska mine and high TDS (see below). I saw your name in the literature and Debra Denton also referred me to you.

[REDACTED]

Any insight you can provide would be appreciated and feel free to call if you prefer. Thanks in advance.

Jamey L. Stoddard

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-----Original Message-----

From: Denton, Debra

Sent: Thursday, December 04, 2014 9:23 AM

To: Stoddard, Jamey

Subject: RE: High TDS Waters and Ionic Imbalance Issue

Hi Jamie

I just got your vm last night. I am swamped on a very high priority issue.

I suggest you email Jim Lazorchak of ORD on the technical issues. Then, we can discuss in the week of December 15.

PEACE = Purposefully Express Appreciation and Compassion for Everyone Debra

Disclaimer: This message was written with voice activated software. It may contain errors. Some of them might be interesting. Observe the context and the meaning will, hopefully, be obvious.

Debra L. Denton, PhD

Environmental Scientist

US EPA Region 9

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From: Stoddard, Jamey

Sent: Wednesday, December 3, 2014 4:42 PM

To: Denton, Debra

Subject: High TDS Waters and Ionic Imbalance Issue

Hi Debra-

I left you a voicemail a bit ago but thought I would follow up with an email as well.

The State of Alaska is asking us to weigh in on a request they have received from a mining facility to use d. magna instead of c. dubia (which they are currently using) for their chronic WET testing. They have max daily and ave monthly WET limits of 12.2TUc and 9.7TUc, respectively. I dont believe they have had any WET violations in the past permit cycle. They are asserting that high TDS in the effluent is contributing to some of the observed toxicity in their tests. They did a side-by-side test with c. dubia and d. magna using mock effluent and are citing literature assessing a 4-day d. magna test as rationale for their request. I have attached their request and test result for reference.



Feel free to give me a call if you would prefer to discuss. Thanks for any thoughts or insight you can provide!

Jamey L. Stoddard

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